## ABSTRACT OF THE DISCLOSURE

A detection device used in an image forming apparatus, comprises a light-emitting element which emits light towards a toner pattern formed on an image carrier, a first light-receiving element which detects the light reflected from the toner pattern and a second light-receiving element which detects the light reflected from the toner pattern in a fashion different from the first light-receiving element. The detection device calculates the amount of toner of the toner pattern based on the output values from the first and second light-receiving elements as well as the position of the toner pattern based on the output value from the first light-receiving element.